FIGURE 1

| TPVgp38aa Yabagp38 | TLKYCYTVTLKDNGLYDKVFYCHYN MNKLILSLLGFVATCNCITLRYNYTVTVK-NGLYDGVFFDYYNDQLVTRI **.* ****. ***** **. ** | | | | |
|-----------------------|--|--|--|--|--|
| TPVgp38aa | 26 25 (SEQ ID NO: 1) 50 SYNHETKEGNUN 61 (SEO ID NO: 2) | | | | |

FIGURE 2

YMTV partial gp38 gene (183 nucleotide):

5**'**

ATGAATAAGTTAATTTTATCGTTGTGGGTTTTGTGGCAACTTGCAATTGTATAACCTTAAGATATAATTATACCGTTA
CGGTAAAGAATGGATTATACGACGGGGTATTTTTTGATTATTACAACGATCAGTTAGTAACGAGGATATCATAAATCA
TGAAACCAAACGAGGAAATGTAAAT (SEQ ID NO: 3)

YMTV partial gp38 gene (61 amino acid):

5,

MNKLILSLLGFVATCNCITLRYNYTVTVKNGLYDGVFFDYYNDQLVTRISYNHETKRGNVN (SEQ ID NO: 2)

SEQ ID NO: 4

MNKLILFSTIVAVCNCITLKYNYTVTLKDNGLYDGVFYDHYNDQLVTKISYNHETRHGNVNFRADWFKIS RSPHTPGNDYNFNFWYSLMKETLEEINKNDSTKTTSLSLITGCYETGLLFGSYGYVETANGPLARYHTGD KRFTKMTHKGFPKVGMLTVKNTLWKDVKTYLGGFEYMGCSLAILDYQKMAKGEIPKDTTPTVKVTGNELE DGNMTLECSVNSFYPPDVITKWIESEHFKGEYKYVNGRYYPEWGRKSDYEPGEPGFPWNIKKDKDANTYS LTDLVRTTSKMSSQLVCVVFHDTLEAQVYTCSEGCNGELYDHLYRKTEEGEGEEDEED*

Tana gp38:

AAGCTTCATGAATAAGTTAATATTATTTAGCACAATTGTAGCAGTTTGTAACT GCATAACTTTAAAATATAATTATACTGTTACGTTAAAAGATAATGGGTTATAC GATGGAGTATTTTACGATCATTACAACGATCAGTTAGTAACGAAAATATCAT ATAACCACGAAACTAGACACGGAAACGTAAATTTTAGGGCTGATTGGTTTAA TATTTCTAGGAGTCCCCACACGCCAGGTAACGATTACAACTTTAACTTTTGGT ATTCTTTAATGAAAGAAACTTTAGAAGAAATTAATAAAAACGATAGCACAAA AACTACTTCGCTTTCATTAATCACTGGGTGTTATGAAACAGGATTATTATTTG GTAGTTATGGGTATGTAGAAACGGCCAACGGACCGTTGGCCAGATACCATAC AGGAGATAAAAGGTTTACGAAAATGACACATAAAGGTTTTCCCAAGGTTGGA ATGTTAACTGTAAAAAACACTCTTTGGAAAGATGTAAAAACTTATCTAGGCG GTTTTGAATACATGGGATGTTCATTAGCTATTTTAGATTACCAAAAAATGGCT AAAGGTGAAATACCAAAAGATACAACACCTACAGTGAAAGTAACGGGTAAT GAGTTAGAAGATGGTAACATGACTCTTGAATGCAGTGTAAATTCATTTTACCC TCCTGACGTAATTACTAAGTGGATAGAAAGCGAACATTTTAAAGGTGAATAT AAATATGTTAACGGAAGATACTATCCAGAATGGGGGAGAAAATCCGATTATG AGCCAGGAGAGCCAGGTTTTCCATGGAATATTAAAAAAAGATAAAGATGCAA ACACATATAGTTTAACAGATTTAGTACGTACAACATCAAAAATGAGTAGTCA ACTAGTATGTGTTTTCCATGACACTTTAGAAGCGCAAGTTTATACTTGTT CTGAAGGATGCAATGGAGAGCTATACGACCACCTATATAGAAAAACAGA AGAAGGAGAAGGTGAAGAGGATGAAGAAGACGGAAACCCTCGAG

MDKLLLFSTIVAVCNCITLKYNYTVTLKDDGLYDGVFYDHYNDQLVTKISYNHETRHGNVNFRADWFNIS RSPHTPGNDYNFNFWYSLMKETLEEINKNDSTKTTSLSLITGCYETGLLFGSYGYVETANGPLARYHTGD KRFTKMTHKGFPKVGMLTVKNTLWKDVKAYLGGFEYMGCSLAILDYQKMAKGKIPKDTTPTVKVTGNELE DGNMTLECTVNSFYPPDVITKWIESEHFKGEYKYVNGRYYPEWGRKSNYEPGEPGFPWNIKKDKDANTYS LTDLVRTTSKMSSQPVCVVFHDTLEAQVYTCSEGCNGELYDHLYRKTEEGEGEEDEED*

SEQ ID NO: 7

YLD gp38:

ATGGATAAGTTACTATTATTTAGCACAATTGTAGCAGTTTGTAACTGCATAAC TTTAAAATATAATTATACTGTTACGTTAAAAGATGATGGGTTATACGATGGAG TATTTTACGATCATTACAACGATCAGTTAGTGACGAAAATATCATATAACCAT GAAACTAGACACGGAAACGTAAATTTTAGGGCTGATTGGTTTAATATTTCTA GGAGTCCCCACACGCCAGGTAACGATTATAACTTTAACTTTTGGTATTCTTTA ATGAAGAACTTTAGAAGAAATTAATAAAAACGATAGCACAAAAACTACTT CGCTTTCATTAATCACTGGGTGTTATGAAACAGGATTATTATTTGGTAGTTAT GGGTATGTAGAAACGGCCAACGGGCCGTTGGCCAGATACCATACAGGAGAT AAAAGGTTTACGAAAATGACACATAAAGGTTTTCCCAAGGTTGGAATGTTAA CTGTAAAAAACACTCTTTGGAAAGATGTAAAAGCTTATTTAGGCGGTTTTTGA ATATATGGGATGTTCATTAGCTATTTTAGATTACCAAAAAATGGCTAAAGGTA AAATACCAAAAGATACAACACCTACAGTGAAAGTAACGGGTAATGAGTTAG AAGATGGTAACATGACTCTTGAATGCACTGTAAATTCATTTTACCCTCCTGAC GTAATTACTAAGTGGATAGAAAGCGAACATTTTAAAGGTGAATATAAATATG TTAACGGAAGATACTATCCAGAATGGGGGAGAAAATCCAATTATGAGCCAGG AGAGCCAGGTTTTCCATGGAATATCAAAAAAGATAAAGATGCAAATACATAT AGTTTAACAGATTTAGTACGTACAACATCAAAAATGAGTAGTCAACCAGTAT GTGTTGTTTTCCATGACACTTTAGAAGCGCAAGTTTATACTTGTTCTGAAGGA TGCAATGGAGAGCTATACGATCACCTATATAGAAAAACAGAAGAAGGG GAAGGTGAAGAGGATGAAGAAGACTGA

MITKAIVILSIITAYVDASAFLVYNYTYTLQDDNHRYDFEVTDYFNDILIKRLKLNSETGRPELRNEPPT WFNETKIRYYPKNNYNFMFWLNRMSETLDEINKLPETSNPYKTMSLTIGCTDLRQLQVNFGYVTVGGNIW TRFDPKNKRFSKVRSRTFPKVGMLTVKSQHWERVMEHLGSMVTLTCPFTADDYYKISKGYIDKPVKPTVT VTGIERGDNTTLICTFDNHYPSSVAVKWYNIEDFAPDYRYDPYVNELLPDTDYLPGEPGYPTITRRLGDK YLFTSSPRVMVPTIMSNRIACVGFHSTLEPSIYRCVNCSGPEPVLQYQGDRRNDLEDEED

SEQ ID NO: 9

Swinepox C1L

ATGATTACTAAAGCGATTGTGATATTGTCTATTATTACAGCATATGTAGATGC TTCCGCATTCTTAGTATACAATTATACATATACTTTACAAGATGATAATCATC GATATGACTTCGAAGTCACCGATTATTTTAATGATATACTAATAAAACGTTTA AAACTAAATAGCGAGACAGGAAGACCAGAATTAAGAAATGAACCACCAACA TGGTTTAATGAGACTAAGATTAGATATTATCCGAAAAATAATTATAATTTTAT GAAACGAGTAATCCTTACAAGACTATGTCCTTGACAATTGGATGTACTGATCT AAGACAACTTCAAGTAAATTTCGGTTATGTTACTGTAGGTGGTAATATATGGA CACGATTCGACCCCAAGAATAAACGCTTTAGTAAAGTTAGATCACGTACATT TCCAAAGGTAGGAATGTTAACTGTTAAATCACAACACTGGGAACGTGTTATG GAACATCTTGGATCAATGGTAACATTAACATGTCCGTTTACAGCGGATGATTA TTATAAAATTTCTAAGGGATATATAGATAAGCCAGTTAAGCCTACTGTTACAG TTACAGGAATTGAAAGAGGAGATAATACTACATTGATATGCACATTTGATAA TCATTATCCGTCGTCGCTCGTTAAATGGTATAACATCGAGGACTTTGCTC CGGACTATCGTTATGATCCGTACGTAAATGAATTGCTTCCTGATACGGACTAT CTACCGGGTGAACCAGGATATCCGACTATAACTAGGAGATTAGGTGATAAAT ATTTATTTACATCATCACCTAGGGTTATGGTACCAACTATCATGTCTAATAGA ATAGCATGTGTTGGATTTCATAGTACGTTAGAACCAAGCATATATAGATGTGT AAACTGCTCGGGACCTGAGCCTGTTTTACAATACCAGGGAGAT AGAAGGAATGACTTGGAGGATGAGGAGGATTAA

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